IN THE CLAIMS

- 1-9. (canceled)
- 10. (currently amended) A method of <u>reducing preventing</u> neuronal cell death in a mammal, comprising:

administering to the mammal a nucleic acid molecule comprising a coding sequence for a neuronal marker (NM) protein selected from the group consisting of: NM Acetylcholine receptor alpha 5; Nerve growth factor receptor, fast; Rat insulin-like growth factor binding protein (rIGFBP-6) mRNA, complete eds.; transforming growth factor, beta receptor I; taurine/beta-alanine transporter; Rat mRNA for proteasome subunit RC10-II, complete eds.; Cholinergie receptor, nicotinie, alpha polypeptide 7 (neuronal nicotinie acetyleholine receptor alpha 7) (bungarotoxin alpha); 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4; heterogeneous nuclear ribonucleoproteins methyltransferase-like 2 (S. ecrevisiae); R.rattus mRNA for epididymal secretory glutathione peroxidase.; matrix metalloproteinase 14, membrane-inserted; eAMP response element binding protein; Solute earrier family 2 A3 (neuron glucose transporter); ATPase, Na+K+ transporting, alpha 1 polypeptide; Fyn proto-oncogene; protein kinase inhibitor, alpha; Rattus norvegicus galactosyltransferase associated kinase (GTA) mRNA, complete eds; Early growth response 1; Glutathione-S-transferase, placental enzyme pi type; neogenin; ATP synthase, H+ transporting, mitochondrial F0 complex, subunit e (subunit 9), isoform 1; 36 kDa calcium-dependent phospholipid-binding protein; This sequence comes from Fig. 1; conceptual translation differs that in published reference; calpactin 1; annexin II=36 kDa ealeium-dependent phospholipid-binding protein [rats, RBL-2H3 basophilie leukemia cells, mRNA, 1362 nt].; Murine leukemia viral (v-raf-1) oneogene homolog 1 (3611-MSV); Inhibitor of DNA binding 1, helix-loop-helix protein (splice variation); alternative splicing: see also

D28754; Rat mRNA for eyelin dependent kinase 2-alpha.; Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide; Solute carrier family 25, member 5 (adenine nucleotid translocator 2, fibroblast isoform (ATP-ADP carrier protein)); Dopa decarboxylase (aromatic L-amino acid decarboxylase); cadherin 22; Rat thymidine kinase mRNA, 5' end.; Solute earrier family 18 (vesicular monoamine) member 1 (chromaffin granule amine transporter); mitogen-activated protein kinase 6; R. norvegicus mRNA for Cdk-activating kinase; ADP-ribosylation factor 2; mismatch repair protein; CD24 antigen; glutamate-cysteine ligase, modifier subunit; PDZ and LIM domain 1 (elfin); easein kinase II beta subunit; Inhibitor of DNA binding 3, dominant negative helix-loop-helix protein; Rattus norvegieus Sprague-Dawley lipid-binding protein mRNA, complete eds; Rat mRNA for eyelin D1, complete eds.; Proliferating cell nuclear antigen; bone morphogenetic protein 2; VGF nerve growth factor inducible; activity regulated cytoskeletal-associated protein; Fos-like antigen 1; Cyclin G1; taurine/beta-alanine transporter; Vesiele-associated membrane protein (synaptobrevin 2); unction plakoglobin; Inhibitor of DNA binding 3, dominant negative helix-loop-helix protein; Heat shock 27 kDa protein; Solute earrier family 18 (vesicular monoamine) member 1 (chromaffin granule amine transporter); mitogen-activated protein kinase 6; Interleukin 6 signal transducer; Synaptophysin; latexin; Nerve growth factor receptor, fast; 36 kDa calciumdependent phospholipid-binding protein; This sequence comes from Fig. 1; conceptual translation differs that in published reference; calpactin 1; annexin II=36 kDa calcium-dependent phospholipid-binding protein [rats, RBL-2H3 basophilie leukemia cells, mRNA, 1362 nt].; transcription factor AP-1 (AA 1-334); Rat e-jun oncogene mRNA for transcription factor AP-1.; B-cell translocation gene 1, anti-proliferative putative anti-proliferative factor; glycoprotein hormones, alpha subunit; Adenomatosis polyposis coli; Rattus norvegicus jun-D gene, complete

eds; R. rattus mRNA for heat shock protein 70.; solute carrier family 30 (zinc transporter), member 1zine transporter; Cathepsin L; eukaryotic initiation factor 5 (eIF-5); 3-hydroxy-3methylglutaryl-Coenzyme A synthase 1; eysteine-rich protein 3; Solute carrier family 7 member A1 (amino acid transporter cationic 1): Cytochrom P450 Lanosterol 14 alpha-demethylase; mye box dependent interacting protein 1; plectin; ATPase, Ca++ transporting, plasma membrane 1; Rattus norvegicus Sprague-Dawley lipid-binding protein mRNA, complete eds; eyelindependent kinase inhibitor 1A (P21); Annexin V; bone morphogenetic protein 2; 6phosphofructo-2-kinase/fructose-2,6-biphosphatase 4; Tumor necrosis factor recentor superfamily, member 1a; ezrin; Pim-1 oncogene; Fos like antigen 2transcription factor; B-cell translocation gene 2, anti-proliferative; Rattus norvegicus RIN1 mRNA, complete eds; Rat brain glucose-transporter protein mRNA, complete eds; jun B proto-oncogene; VGF nerve growth factor inducible; Interleukin 2 receptor, beta chain; Early growth response 1; Rat mRNA for LDL-receptor; Rat mRNA for 53 kD polypeptide induced by growth factors (EGF) and oncogenes (H-ras; sre; polyoma middle T); urinary plasminogen activator receptor 2urinary-type plasminogen activator receptor; Rat transformation-associated protein (34A) mRNA, complete eds; serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1; Fos-like antigen 1; and activity regulated cytoskeletal-associated protein, whereby neuronal cell death in the mammal is reduced inhibited or prevented.

11. (currently amended) A method of <u>reducing preventing</u> neuronal cell death in a mammal, comprising:

administering to the mammal a purified human neuronal marker (NM) protein selected from the group consisting of: NM-Acetylcholine receptor alpha 5; Nerve growth factor receptor, fast; Rat insulin-like growth factor binding protein (rIGFBP-6) mRNA, complete eds.;

transforming growth factor, beta receptor I; taurine/beta-alanine transporter; Rat mRNA for proteasome subunit RC10-II, complete eds.; C holinergic receptor, nicotinic, alpha polypeptide 7 (neuronal nicotinic acetycholine receptor alpha 7) (bungarotoxin alpha); 6-phosphofructo-2kinase/fructose-2,6-biphosphatase 4; heterogeneous nuclear ribonucleoproteins methyltransferase-like 2 (S. cerevisiae); R.rattus mRNA for epididymal secretory glutathione peroxidase.; matrix metalloproteinase 14, membrane-inserted; eAMP response element binding protein; Solute earrier family 2 A3 (neuron glucose transporter); ATPase, Na+K+ transporting. alpha 1 polypeptide; Fyn proto-oneogene; protein kinase inhibitor, alpha; Rattus norvegicus galactosyltransferase associated kinase (GTA) mRNA, complete eds; Early growth response 1; Glutathione-S-transferase, placental enzyme pi type; neogenin; ATP synthase, H+ transporting, mitochondrial F0 complex, subunit e (subunit 9), isoform 1; 36 kDa calcium-dependent phospholipid-binding protein; This sequence comes from Fig. 1; conceptual translation differs that in published reference; calpactin 1; annexin H=36 kDa calcium-dependent phospholipidbinding protein [rats, RBL-2H3 basophilie leukemia cells, mRNA, 1362 nt].; Murine leukemia viral (v-raf-1) oncogene homolog 1 (3611-MSV); Inhibitor of DNA binding 1, helix-loop-helix protein (splice variation); alternative splicing: see also D28754; Rat mRNA for eyelin dependent kinase 2-alpha.; Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide; Solute carrier family 25, member 5 (adenine nucleotid translocator 2, fibroblast isoform (ATP-ADP carrier protein)); Dopa decarboxylase (aromatic L-amino acid decarboxylase); cadherin 22; Rat thymidine kinase mRNA, 5' end.; Solute carrier family18 (vesicular monoamine) member 1 (chromaffin granule amine transporter); mitogen-activated protein kinase 6; R.norvegicus mRNA for Cdk-activating kinase; ADP-ribosylation factor 2; mismatch repair protein; CD24 antigen; glutamate-eysteine ligase, modifier subunit; PDZ and LIM domain 1 (elfin); casein kinase II beta subunit; Inhibitor of DNA binding 3, dominant negative helix-loop-helix protein; Rattus norvegicus Sprague-Dawley lipid-binding protein mRNA, complete eds; Rat mRNA for eyelin D1, complete eds.; Proliferating cell nuclear antigen; bone morphogenetic protein 2; VGF nerve growth factor inducible; activity regulated eytoskeletal-associated protein; Fos-like antigen 1; Cyclin G1; taurine/beta-alanine transporter; Vesiele-associated membrane protein (synaptobrevin 2); unction plakoglobin; Inhibitor of DNA binding 3, dominant negative helix-loop-helix protein; Heat shock 27 kDa protein; Solute earrier family 18 (vesicular monoamine) member 1 (chromaffin granule amine transporter); mitogenactivated protein kinase 6; Interleukin 6 signal transducer; Synaptophysin; latexin; Nerve growth factor receptor, fast; 36 kDa ealeium-dependent phospholipid-binding protein; This sequence comes from Fig. 1; conceptual translation differs that in published reference; calpactin 1; annexin H=36 kDa calcium-dependent phospholipid-binding protein [rats, RBL-2H3 basophilic leukemia cells, mRNA, 1362 nt].; transcription factor AP-1 (AA 1-334); Rat e-jun oncogene mRNA for transcription factor AP-1.; B-cell translocation gene 1, anti-proliferative putative antiproliferative factor; glycoprotein hormones, alpha subunit; Adenomatosis polyposis coli; Rattus norvegicus jun-D gene, complete eds; R.rattus mRNA for heat shock protein 70.; solute earrier family 30 (zine transporter), member 1zine transporter; Cathepsin L; cukaryotic initiation factor 5 (cIF-5); 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1; cysteine-rich protein 3; Solute earrier family 7 member A1 (amino acid transporter cationic 1); Cytochrom P450 Lanosterol 14 alpha-demethylase; mye box dependent interacting protein 1; pleetin; ATPase, Ca++ transporting, plasma membrane 1; Rattus norvegieus Sprague-Dawley lipid-binding protein mRNA, complete eds; eyelin-dependent kinase inhibitor 1A (P21); Annexin V; bone morphogenetic protein 2; 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4; Tumor

neerosis factor receptor superfamily, member 1a; ezrin; Pim-1 oncogene; Fos like antigen 2transcription factor; B-cell translocation gene 2, anti-proliferative; Rattus norvegicus RIN1 mRNA, complete eds; Rat brain glucose transporter protein mRNA, complete eds; jun B proteoncogene; VGF nerve growth factor inducible; Interleukin 2 receptor, beta chain; Early growth response 1; Rat mRNA for LDL-receptor; Rat mRNA for 53 kD polypeptide induced by growth factors (EGF) and oncogenes (H-ras; sre; polyoma middle T); urinary plasminogen activator receptor 2urinary type plasminogen activator receptor; Rat transformation-associated protein (34A) mRNA, complete eds; serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1; Fos-like antigen 1; and activity regulated cytoskeletal-associated protein, whereby neuronal cell death in the mammal is reduced inhibited or prevented.

12. (currently amended) The method of claim 10 or 11 wherein the subject mammal has retinal cell degeneration.

13-53. (canceled)